

Student Homework Sheet — Stage 14: Deployment & Monitoring

Assignment (Required)

Write a **200–300 word reflection** covering:

1. Risks your current project model (or a prior model) could face **if deployed**.
2. **Exactly what you would monitor** across four layers: Data, Model, System, Business.
3. **Who owns** ongoing maintenance and how handoffs would work.

Chain: **In the lecture, we learned** how to map risks → metrics and design simple logging/alerts. **Now, you will adapt** that thinking to your project context by identifying specific metrics and ownership.

Deliverables

- **reflection.md** (or PDF): 200–300 words
- Optional (advanced):
 - **dashboard_sketch.png/pdf** — wireframe with panels/metrics
 - **handoff_plan.md** — 5–10 bullets describing deployment path & runbook links

Step-by-Step

1. List 3–5 credible **failure modes** (e.g., schema drift, increased nulls, label delay).
2. For each failure, name a **monitoring metric** and a **threshold** you would start with.
3. Specify **alert recipients** and what the **runbook** first step is.
4. State **retraining cadence** or triggers (e.g., 5% PSI on key features, 2-week rolling AUC < 0.60).
5. Summarize **ownership**: who updates dashboards, who approves rollbacks, where issues are logged.

Grading Rubric (100 pts)

- (40) **Specificity**: Metrics & thresholds are concrete and relevant.
- (20) **Coverage**: Addresses all four layers (Data/Model/System/Business).
- (20) **Ownership**: Clear roles & handoffs.
- (10) **Feasibility**: Proposed monitoring is realistic for course scope.
- (10) **Clarity**: Writing is concise and structured.

Example Submission Expectations

- Mention of **data freshness** (e.g., max minutes since last batch), **null rate**, **schema hash**.
- A model metric (e.g., rolling MAE / AUC) with period and window.
- A system metric (e.g., p95 latency or job success rate).
- At least one business KPI (e.g., approval rate).
- Named owner (e.g., "Platform on-call", "Analyst weekly review").

Submission: Upload to LMS or repo under folder **/handoff/**. **Due:** Next session.